

- 11 -

Claims:

1. An assay method for detecting infectious prion protein in a sample from a mammalian subject, said method comprising: obtaining a prion protein containing sample from said subject; contacting said sample with an agent which serves to digest non-infectious prion protein and to partially digest infected prion protein to yield a prion protein polypeptide residue; contacting the digested sample with an antibody capable of binding to a polypeptide having the amino acid sequence Vc

(Gly-Gly-Gly-Trp)-Gly-Gln-Gly-Gly-R<sub>1</sub>-R<sub>2</sub>-His-R<sub>3</sub>-Gln-Trp-Asn-Lys-Pro-R<sub>4</sub>-Lys-Pro-Lys-Thr-R<sub>5</sub>-R<sub>6</sub>-Lys(-His-R<sub>7</sub>-Ala-Gly)  
(Vc)

(wherein R<sub>1</sub> is either Gly or absent;  
R<sub>2</sub> is either Thr or Ser;  
R<sub>3</sub> is an amino acid residue selected from Gly, Ser and Asn;  
R<sub>4</sub> and R<sub>5</sub> are each independently either Asn or Ser;  
R<sub>6</sub> is an amino acid residue selected from Met, Leu and Phe;  
R<sub>7</sub> is either Val or Met; and wherein one or more residues within brackets may be present or absent with the proviso that if they are present they are attached to the rest of the peptide in sequence); and detecting conjugates of said antibody and said prion protein polypeptide residue; characterized in that the detection of said conjugates comprises chemical, biological or biochemical amplification of a detectable species and detection of the amplified species.

2. A method as claimed in claim 1 wherein said subject is human, preferably animate.

3. A method as claimed in either of claims 1 and 2 for

- 12 -

detecting infectious prion protein associated with CJD, nvCJD or kuru.

4. A kit for use in the assay method of any one of  
5 claims 1 to 3, said kit comprising:
- (i) a Vc-binding antibody;
  - (ii) optionally a Va-binding antibody;
  - (iii) optionally proteinase K;
  - 10 (iv) a material capable of chemical, biological or biochemical amplification and detection or of causing chemical, biological or biochemical amplification of a detectable species, said material optionally being conjugated to antibody (i); and
  - 15 (v) optionally instructions for the performance of said assay method.
5. The use of a iPrP binding antibody in the  
20 manufacture of a medicament for use in the treatment of human TSE.